AIMNT Segmentation Lessons Learned

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Purpose

To provide lessons learned during the development and compliance evaluation of the NT-based segment Asset Information Management for NT (AIMNT)

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Outline

- Background
- Actions Taken
- Lessons Learned
- Setup.exe Installation Routine
- Demo

Background

- Windows version of GCCS-AF legacy application SYSMAN
  - Collects hardware and software information
  - FTP's report to central DISA database server
  - Written in-house by active duty Air Force personnel
  - Installs an NT service for running of the program in the background without user intervention
- Deployed on COE versions 3.0.0.6 and 3.4.0.2
- Initially Full segmentation process used

Background (con't)

- Full segment was not Logo Program compliant
- To install service and assign it to an account in Administrators group required a home grown PostInstall.exe
- Segment contains:
  - Executables
  - Static data
  - Dynamic data
    - Weekly report
    - Temporary files

Actions Taken

- Converted to an Abbreviated segment
- Used commercial installation tools to:
  - Create directory structure and install files
  - Check for dependencies
  - Install service
- Used Windows NT Resource Kit utilities to:
  - Assign service to local or domain account (NTRIGHTS)
  - Set directory and file permissions (XCALS)

Actions Taken (con't)

- Installation Packages for:
  - CD-ROM (Setup.exe & SDFs)
  - Floppy (Setup.exe & SDFs)
  - Web Installation (Setup.exe only)

Lessons Learned

- To be COE and Logo Program compliant you must use the Abbreviated segmentation process
  - Install and uninstall requirements
  - Component registration
  - Dependencies
  - Conflicts
  - Directory structure
  - Release Notes
  - Security

Lessons Learned (con't)

- COE kernel does not configure platform or identify the three (3) required partitions
  - Operating System
  - Software
  - Data
- Easy to do dependency and conflict detection in Setup.exe using registry, if all components are Logo program compliant

Lessons Learned (con't)

- Installation of a service and making registry entries is easy using commercial installation tools versus writing own Win32 API routine

- MakeInstall on 3.4.0.2 and 3.0.0.6 COEInstaller will read TOC but can not find segment to install

- MakeInstall on 3.0.0.6:
  - Both versions of COEInstaller will install segment SDFs
  - PreInstall generated errors will bring up error message but segment will install any way

Setup.exe Installation Routine

- Installation package source code is available

```
program
    CheckRequirements();
    SetupInstall();
    SetupScreen();
    if (ShowDialogs()<0) goto end_install;
    if (ProcessBeforeDataMove()<0) goto
   end_install;
    if (MoveFileData()<0) goto end_install;
    if (ProcessAfterDataMove()<0) goto end_install;
```

Setup.exe Installation Routine (con't)

```
if (SetupRegistry()<0) goto end_install;
if (SetupUninstallRegistry() < 0) goto
end_install;
if (SetupFolders()<0) goto end_install;
SetPermissions();
SetDataPermissions();
StartService();
CleanUpInstall();
if (bInstallAborted) then
    abort;
endif;
endprogram
```

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